

We claim:

1. Apparatus for use by a wireless device in a wireless communications environment including multiple access points and stations, wherein stations gain network access by associating with one of the access points, comprising:

logic for associating with a current access point on one channel;

logic for ascertaining whether the wireless device should attempt to associate with an access point operating on another channel;

logic for requesting association with the access point operating on another channel if it is ascertained that the wireless device should attempt to associate with said access point.

2. The apparatus of claim 1 further comprising:

logic for automatically collecting information about access points operating on other channels.

3. The apparatus of claim 2 wherein the logic for ascertaining ascertains that the wireless device should attempt to associate with another access point operating on said different channel if the access point on said different channel is closer than the current access point.

4. The apparatus of claim 3 wherein the logic for ascertaining ascertains that the access point on said different channel is closer than the current access point by:

calculating a first biased distance between the wireless device and the current access point based on “x” samples;

calculating a second biased distance between the wireless device and the access point operating on said another channel based on “y” samples where “y” is less than “x”;
Ascertaining that the access point operating on said another channel is closer than the current access point if the second biased distance is less than the first biased distance.

5. The apparatus of claim 3 wherein the logic for requesting association requests association by sending a message to the access point operating on said another channel.